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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,697	04/07/2001	Jahanshah Moreh	60468.300301	5064

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INTELLECTUAL PROPERTY LAW OFFICE
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EXAMINER

TRAN, PHILIP B

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 07/22/2004

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,697

Applicant(s)

MOREH ET AL.

Examiner

Philip B Tran

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the Appeal Brief filed on 4/19/2004. In view of the Appeal Brief filed on 4/19/2004, PROSECUTION IS HEREBY REOPENED. New office action is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Therefore, claims 1-42 are pending and presented for further examination.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15 and 23-36 are rejected under 35 U.S.C. § 102(b) as being anticipated by Baru et al (Hereafter, Baru), "The SDSC Storage Resource Broker", ACM, 1998.

Regarding claim 1, Baru teaches a system for authenticating a subject residing in a subject domain on a network to a server application residing in a server domain on the network, wherein an authentication mechanism residing in an authentication domain on the network affects the service provided by the server application, the system comprising:

a client for communicating with other components of the system and for authenticating the subject to other components of the system by providing client credentials on behalf of the subject (= ticket mechanism) [see Sec. 2.5 on Page 3], wherein said client also resides in the subject domain (= client communicates with other components like SRB server for authentication) [see Fig. 2 and Sec. 3 on Page 5]; and

a protocol proxy (= Storage Resource Broker (SRB) middleware) [see Sec. 3 on Page 5] for communicating between said client and the authentication mechanism and for authenticating said client based on said client credentials, for obtaining from the authentication mechanism temporary credentials for said client to access the server application, and for creating from said temporary credentials an authentication name assertion allowing said client to access the server application (= proxy operations for communication between client and SRB agent as authentication mechanism) [see Secs. 2.8-2.10 on Page 4 and Sec. 3 on Page 5].

Regarding claim 2, Baru further teaches the subject is non-human and said client is integrated into the subject, and said client gathers subject credentials for the subject

and communicates said subject credentials to said protocol proxy [see Sec. 2.10 on Page 4 and Sec. 3 on Page 5]

Regarding claim 3, Baru further teaches a plurality of the authentication mechanisms are present on the network, and the system further comprising an agent for communicating with other components of the system and for interacting with said client to chose an appropriate authentication mechanism from among said plurality of the authentication mechanisms, wherein said agent resides in an agent domain on the network [see Fig. 2].

Regarding claims 4-7, Baru further teaches the client interacts with said protocol proxy to determine a specification of the authentication mechanism and said client communicates said specification to said agent and wherein said client includes a callback mechanism for determining said appropriate authentication mechanism for the server application from among said plurality of the authentication mechanisms and wherein said callback mechanism interacts with the subject to determine said appropriate authentication mechanism and wherein said callback mechanism accesses a configuration repository to determine said appropriate authentication mechanism [see Sec. 3 on Page 5].

Regarding claim 8, Baru further teaches the agent includes a mechanism resolver for determining from said plurality of the authentication mechanisms a subset of

zero or more of the authentication mechanisms which affects the service provided by the server application [see Fig. 2 and Sec. 3 on Page 5].

Regarding claim 9, Baru further teaches the agent further includes an authentication agent for brokering between said client and said mechanism resolver [see Fig. 2].

Regarding claim 10, Baru further teaches the agent further includes a mechanism repository for storing information about said plurality of the authentication mechanisms and said mechanism resolver queries said mechanism repository when determining said subset of zero or more of the authentication mechanisms which affects the service provided by the server application [see Sec. 3.1 on Page 5 and Page 6].

Regarding claims 11-12, Baru further teaches the agent further includes a mechanism registrator for the authentication mechanism to register in said mechanism repository by adding information about itself and wherein said mechanism registrator is further for the authentication mechanism to update itself in said mechanism repository by changing information about itself [see Sec. 2.5 on Page 3]

Regarding claims 13-14, Baru further teaches said protocol proxy resides in said agent domain on the network or in the authentication domain on the network [see Fig. 2 and Sec. 2.8 on Page 4].

Regarding claim 15, Baru further teaches the protocol proxy uses a standard security protocol to communicate with said client and a mechanism-specific protocol to communicate with the authentication mechanism [see Sec. 2.10 on Page 4 and Secs. 3-3.1 on pages 5 and 6]

Claim 23 is rejected under the same rationale set forth above to claim 1.

Claims 24-33 are rejected under the same rationale set forth above to claims 2-11, respectively.

Claims 34-36 are rejected under the same rationale set forth above to claims 13-15, respectively.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 17 and 37 are rejected under 35 U.S.C 103(a) as being unpatentable over Baru et al (Hereafter, Baru), "The SDSC Storage Resource Broker", ACM, 1998 in view of admitted prior art (APA).

Regarding claim 17, Baru does not explicitly teach at least one of said client and said protocol proxy authenticates using SRP protocol. However, APA, in the same field of federated authentication endeavor, discloses the use of SRP protocol [see the Instant Application on Pages 1 and 2]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of SRP protocol because it would have enabled a process for authenticating clients to the remote servers in a more secure fashion.

Claim 37 is rejected under the same rationale set forth above to claim 17.

6. Claims 18-22 and 38-42 are rejected under 35 U.S.C 103(a) as being unpatentable over Baru et al (Hereafter, Baru), "The SDSC Storage Resource Broker", ACM, 1998 in view of Hele et al (Hereafter, Hele), U.S. Pat. Application Pub. No. US 2002/0120474.

Regarding claim 18-22, Baru does not explicitly teach protocol proxy produces a signed name assertion wherein said signed name assertion is contained in a S2ML document and wherein said protocol proxy further produces a signed name entitlement and wherein said protocol proxy uses a proxy name assertion to authenticate itself to

the client and there is an adapter for receiving said authentication name assertion, recreating said credentials, and permitting said client to access the server application based on said credentials. However, Hele, in the same field of authentication endeavor, discloses the use of XML adapter for authentication purpose [see Paragraph 0054]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the implementation of XML adapter because it would have provided a more secure way for the client to access the server application.

Claims 38-42 are rejected under the same rationale set forth above to claims 18-22.

Response to Arguments

7. Applicant's arguments have been fully considered but they are not persuasive because of the following reasons :

Baru teaches a method and system for authenticating a subject residing in a subject domain on a network to a server application residing in a server domain on the network, wherein an authentication mechanism residing in an authentication domain on the network affects the service provided by the server application comprising a client for communicating with other components of the system and for authenticating the subject to other components of the system by providing client credentials on behalf of the subject (= ticket mechanism) [see Sec. 2.5 on Page 3], wherein said client also resides in the subject domain. For example, client communicates with other components like SRB server for authentication [see Fig. 2 and Sec. 3 on Page 5].

In addition, Baru further teaches a protocol proxy (= Storage Resource Broker (SRB) middleware) [see Sec. 3 on Page 5] for communicating between said client and the authentication mechanism and for authenticating said client based on said client credentials, for obtaining from the authentication mechanism temporary credentials for said client to access the server application, and for creating from said temporary credentials an authentication name assertion allowing said client to access the server application. For example, proxy operations for communication between client and SRB agent as authentication mechanism [see Secs. 2.8-2.10 on Page 4 and Sec. 3 on Page 5].

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a communication path shaped like the letter 'T' rotated 90 degrees counter-clockwise as shown in Fig. 1 of the instant application and linear communication path "Client – Protocol Proxy – Authentication Mechanism – Protocol Client" as shown in claim 1) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

From the claim language point of view [see claim 1], there is no way triangle or "T" shaped rotated 90 degrees counter clockwise can be drawn to illustrate chronological step-by-step carried out for communication among components of client-server network as argued by applicants. Furthermore, one cannot determine based on

the language of claim 1 limitations to obtain the linear communication path (Client – Protocol Proxy – Authentication Mechanism – Protocol Client) as argued by applicants.

Therefore, the examiner asserts that the cited prior arts teach or suggest the subject matter broadly recited in independent claims. Claims 2-22 and 24-42 are rejected at least by virtue of their dependency on independent claims and by other reasons set forth above. Accordingly, rejections to claims 1-42 are respectfully maintained as shown above.

Other References Cited

8. The following references cited by the examiner but not relied upon are considered pertinent to applicant's disclosure.

A) Hsing et al, U.S. Pat. No. 6,735,310.

B) Fuh et al, U.S. Pat. No. 6,463,474.

C) Earl et al, U.S. Pat. No. 6,112,228.

9. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS, OR THIRTY DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (703) 308-8767. The Group fax phone number is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam, can be reached on (703) 308-6662.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Philip Tran

Philip Tran
Art Unit 2155
July 8, 2004